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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Toshifumi Yamamoto

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EXAMINER

DANIEL JR, WILLIE J

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/926,434	Applicant(s) YAMAMOTO, TOSHIFUMI	
	Examiner Willie J. Daniel, Jr.	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24,26-28 and 63-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24,26-28 and 63-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's RCE amendment filed on 19 January 2006. **Claims 24, 26-28, and 63-65** are now pending in the present application and **claims 1-23, 25, and 29-62** are canceled. This office action is made **Non-Final**.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 January 2006 has been entered.

Claim Objections

3. **Claim 63** is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 63 recites the limitation "...wherein the connection control section transmits an authentication code to the car mounted electronic device in the connection procedure via the second interface..." in lines 2-3 of the claim. The limitation of **claim 28** is the same limitation as recited in **claim 63**.

4. Regarding **claim 64**, note that the use of “*protocols*” (for example, Bluetooth and 802.11), protocols and standards change over time, hence, it is inappropriate to have the scope of a claim change with time. Since organizations implementing standards meet regularly and have the authority to modify standards, any connection a claim may have to these standards may have varying scope over time. The other aspect arising from this is enablement. If the standard changes, the disclosure may no longer support the limitation. See In re Wiggins, 179 USPQ 421.

Specification

5. The use of the trademark BLUETOOTH has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24, 26-28, 63, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chennakeshu et al.** (hereinafter Chennakeshu) (**US 6,542,758 B1**) in view of **Raith** (**US 6,493,550 B1**) and **Chen et al.** (hereinafter Chen) (**US 5,751,719**).

Regarding **claims 24** and **65**, Chennakeshu discloses a base unit (20) which reads on the claimed “mobile communication terminal” connectable to a control unit (40) which reads on the claimed “car mounted electronic device” (see col. 3, line 60 - col. 4, line 3; col. 2, lines 47-51; Figs. 1-3, 5, 7, and 9), the mobile communication terminal comprising:

a RF transceiver (24) which read on the claimed “first interface” for making radio communication with a mobile communication network (see col. 4, lines 1-3, 11-16; col. 6, lines 8-11; Figs. 2 “ref. 24”, 5, and 6 “ref. 103”), where the base unit (20) or handheld terminal (20) of the mobile phone system (10) can communicate with stations outside of the vehicle;

a interface module (32) which reads on the “second interface” for making radio communication with the car mounted electronic device (see col. 4, lines 22-23, 60-64; Figs. 2 “ref. 32” and 3 “ref. 54”); and

a connection control section for controlling connection to the car mounted electronic device (20) (see col. 4, lines 16-22, 45-57; Figs. 2-3), where the system has control logic (26, 52) for controlling operation;

wherein the connection control section starts a connection procedure with the car mounted electronic device (40) by transmitting a response signal that includes attribute information of the mobile communication terminal (20) to the car mounted electronic device (40) (see col. 8, line 64 - col. 9, line 23; col. 8, lines 54-57)

when the car mounted electronic device (40) to determine presence of a mobile communication terminal (20) within a radio area of the car mounted electronic device (40) is detected (see col. 8, lines 54-57; col. 6, lines 31-42), and

sets communication mode in a hands-free mode automatically if the connection procedure is completed (see col. 6, lines 55-65). Chennakeshu does not specifically disclose having the features when a paging signal transmitted from the car mounted electronic device to determine presence of a mobile communication terminal within a radio area of the car mounted electronic device is detected, and disconnects the connection with the car mounted electronic device and sets the communication mode in its own communication mode if no packet, which is periodically output from the car mounted electronic device for acknowledgement of the connection, is received for a predetermined time period. However, the examiner maintains that the feature when a paging signal transmitted from the car mounted electronic device to determine presence of a mobile communication terminal within a radio area of the car mounted electronic device is detected was well known in the art, as taught by Raith.

In the same field of endeavor, Raith discloses the feature when a paging signal transmitted from the car mounted electronic device to determine presence of a mobile communication terminal within a radio area of the car mounted electronic device is detected (see col. 7, lines 1-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Chennakeshu and Raith to have the feature when a paging signal transmitted from the car mounted electronic device to determine presence of a mobile communication terminal within a radio area of the car mounted electronic device is detected, in order to detect the presence of a system, as taught by Raith (see col. 3, lines 1-3, 6-9, 47-51). The combination of Chennakeshu and Raith does not specifically disclose having the feature disconnects the connection with the car mounted electronic device and sets the communication mode in its own communication mode if no packet, which is periodically output from the car mounted electronic device for acknowledgement of the connection, is received for a predetermined time period. However, the examiner maintains that the feature disconnects the connection with the car mounted electronic device and sets the communication mode in its own communication mode if no packet, which is periodically output from the car mounted electronic device for acknowledgement of the connection, is received for a predetermined time period was well known in the art, as taught by ^{Chen} Raith.

In the same field of endeavor, ^{Chen} Raith discloses the feature disconnects the connection with the car mounted electronic device and sets the communication mode in its own communication mode if no packet, which is periodically output from the car mounted

electronic device for acknowledgement of the connection, is received for a predetermined time period (see col. 9, line 51 - col. 10, line 25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Chennakeshu, Raith, and Chen to have the feature disconnects the connection with the car mounted electronic device and sets the communication mode in its own communication mode if no packet, which is periodically output from the car mounted electronic device for acknowledgement of the connection, is received for a predetermined time period, in order to detect a disconnect, as taught by Chen (see col. 2, lines 7-10, 13-17).

Regarding **claim 26**, the combination of Chennakeshu, Raith, and Chen discloses every limitation claimed, as applied above (see claim 24), in addition Chennakeshu further discloses the mobile communication terminal according to claim 24, further comprising an information transfer control section for transferring an incoming call to the car mounted electronic device (40) via the second interface (32) when the incoming call is received from the mobile communication network via the first interface (24) (see col. 4, lines 13-22, 42-57; Figs. 2-3).

Regarding **claim 27**, the combination of Chennakeshu, Raith, and Chen discloses every limitation claimed, as applied above (see claim 24), in addition Chennakeshu further discloses the mobile communication terminal according to claim 24, further comprising an information transfer control section configured to transfer an outgoing call to the mobile communication network via the first interface (24) when the outgoing call is received from

the car mounted electronic device (40) via the second interface (32) (see col. 4, lines 13-22, 42-57; Figs. 2-3).

Regarding **claims 28 and 63**, the combination of Chennakeshu, Raith, and Chen discloses every limitation claimed, as applied above (see claim 24), in addition Chennakeshu further discloses the mobile communication terminal according to claim 24, wherein the connection control section transmits an authentication code to the car mounted electronic device (40) in the connection procedure via the second interface (32) (see col. 8, lines 18-64), where the system has a unique identification number for authorized users.

Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Chennakeshu et al.** (hereinafter Chennakeshu) (**US 6,542,758 B1**) in view of **Raith** (**US 6,493,550 B1**) and **Chen et al.** (hereinafter Chen) (**US 5,751,719**) as applied to claims 28 above, and further in view of **Larsson et al.** (hereinafter Larsson) (**US 6,697,638 B1**).

Regarding **claim 64**, the combination of Chennakeshu, Raith, and Chen discloses every limitation claimed as applied above (see claim 28), in addition Chennakeshu further discloses the mobile communication terminal according to claim 28, wherein the second interface is a Bluetooth radio circuit (see col. 4, lines 60-67). The combination of Chennakeshu, Raith, and Chen does not specifically disclose having the feature the connection control section transmits a Bluetooth address of the Bluetooth radio circuit in the connection procedure. However, the examiner maintains that the feature the connection control section transmits a Bluetooth address of the Bluetooth radio circuit in the connection procedure was well known in the art, as taught by Larsson.

In the same field of endeavor, Larsson discloses the feature the connection control section transmits a Bluetooth address of the Bluetooth radio circuit in the connection procedure (see col. 4, lines 1-5; Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Chennakeshu, Raith, Chen, and Larsson to have the feature the connection control section transmits a Bluetooth address of the Bluetooth radio circuit in the connection procedure, in order to define a new telephone interface device adapted to be mounted in a vehicle, as taught by Larsson (see col. 1, lines 44-45).

Response to Arguments

7. Applicant's arguments filed 19 January 2006 have been fully considered but they are not persuasive.

The Examiner respectfully disagrees with applicant's arguments as the applied reference(s) provide more than adequate support and to further clarify (see the above claims).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (571) 272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor(s), Marsha D. Banks-Harold can be reached on (571) 272-7905 or Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

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(toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,JR/

WJD,JR
16 August 2006


ERIKA A. GARY
PRIMARY EXAMINER